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(FILE 'HOME' ENTERED AT 14:34:56 ON 20 MAY 2008)

FILE 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH, LIFESCI' ENTERED AT 14:35:33 ON 20 MAY 2008

L1 8 S (ISOLAT? OR PURIF?) (6A)LIVER(3A)BASEMENT(3A)MEMBRANE
L2 4 DUP REM L1 (4 DUPLICATES REMOVED)
L3 85962 S DNA(3A)CONTENT
L4 0 S L2 AND L3
L5 169 S LIVER(3A)BASEMENT(3A)MEMBRANE
L6 0 S L3 AND L5
L7 112005 S DNA(6A) (CONTENT OR WEIGHT)
L8 0 S L5 AND L7
L9 113 DUP REM L5 (56 DUPLICATES REMOVED)

=> d au ti so pi 10-39 19

L9 ANSWER 10 OF 113 CAPLUS COPYRIGHT 2008 ACS on STN
IN McPherson, Timothy B.
TI Extracellular matrix material particles and methods of preparation
SO U.S. Pat. Appl. Publ., 8pp.
CODEN: USXXCO
PATENT NO. KIND DATE APPLICATION NO. DATE

PI US 20060292227 A1 20061228 US 2006-472947 20060622

L9 ANSWER 11 OF 113 CAPLUS COPYRIGHT 2008 ACS on STN
IN Chen, Zhinan; Xing, Jinliang; Zhang, Sihe; Yang, Xiangmin; Wang, Li; Ye, Hui; Li, Biehu
TI cDNA and protein sequences of monoclonal antibody HAb18Gedomabl specific to human CD147 and the use of the antibody for treatment of liver fibrosis
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 17 pp.
CODEN: CNXXEV
PATENT NO. KIND DATE APPLICATION NO. DATE

PI CN 1782077 A 20060607 CN 2004-10078858 20040909

L9 ANSWER 12 OF 113 CAPLUS COPYRIGHT 2008 ACS on STN
AU Brown, Bryan; Lindberg, Kristina; Reing, Janet; Stolz, Donna Beer; Badylak, Stephen F.
TI The Basement Membrane Component of Biologic Scaffolds Derived from Extracellular Matrix
SO Tissue Engineering (2006), 12(3), 519-526
CODEN: TIENFP; ISSN: 1076-3279

L9 ANSWER 13 OF 113 MEDLINE on STN DUPLICATE 1
AU Zeisberg Michael; Kramer Kyle; Sindhi Nazia; Sarkar Pradip; Upton Melissa; Kalluri Raghu
TI De-differentiation of primary human hepatocytes depends on the composition of specialized liver basement membrane.
SO Molecular and cellular biochemistry, (2006 Feb) Vol. 283, No. 1-2, pp. 181-9.
Journal code: 0364456. ISSN: 0300-8177.

L9 ANSWER 14 OF 113 CAPLUS COPYRIGHT 2008 ACS on STN
AU Xu, Xin; Li, Yiming; Ji, Hong; Hou, Chongzhi; Cheng, Yingbo; Zhao, Xiaoge
TI Localization and expression level of integrin subunits alpha 3 and alpha M in human cirrhotic liver
SO Disi Junyi Daxue Xuebao (2005), 26(17), 1585-1587
CODEN: DJDXEG; ISSN: 1000-2790

L9 ANSWER 15 OF 113 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN
AU Badylak, Stephen F. [Inventor, Reprint Author]
TI Biomaterial derived from vertebrate liver tissue.
SO Official Gazette of the United States Patent and Trademark Office Patents,
(Sep 21 2004) Vol. 1286, No. 3. <http://www.uspto.gov/web/menu/patdata.html>
. e-file.
ISSN: 0098-1133 (ISSN print).
PI US 6793939 20040921

L9 ANSWER 16 OF 113 CAPLUS COPYRIGHT 2008 ACS on STN
IN Badylak, Stephen Francis
TI Vascularization enhanced graft constructs
SO PCT Int. Appl., 30 pp.
CODEN: PIXXD2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003092604	A2	20031113	WO 2003-US13555	20030501
WO 2003092604	A3	20040603		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2483913	A1	20031113	CA 2003-2483913	20030501
AU 2003243184	A1	20031117	AU 2003-243184	20030501
EP 1503789	A2	20050209	EP 2003-747631	20030501
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
CN 1665527	A	20050907	CN 2003-815572	20030501
JP 2005533535	T	20051110	JP 2004-500789	20030501

L9 ANSWER 17 OF 113 CAPLUS COPYRIGHT 2008 ACS on STN
IN Badylak, Stephen Francis; Morris, Kenneth Robert
TI Compositions for inhibiting hypersensitivity
SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003059284	A2	20030724	WO 2003-US650	20030109
WO 2003059284	A3	20031231		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003210474	A1	20030730	AU 2003-210474	20030109

L9 ANSWER 18 OF 113 CAPLUS COPYRIGHT 2008 ACS on STN
IN Badylak, Stephen Francis; Rodenberg, Eric James

TI Biomaterial derived from vertebrate liver tissue
SO PCT Int. Appl.

CODEN: PIXXD2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003059061	A1	20030724	WO 2003-US604	20030109
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003202261	A1	20030730	AU 2003-202261	20030109
US 20050019419	A1	20050127	US 2004-500511	20040630

L9 ANSWER 19 OF 113 CAPLUS COPYRIGHT 2008 ACS on STN

IN Plouhar, Pamela Lynn; Malaviya, Prasanna; Schwartz, Herbert Eugene

TI Cartilage repair and regeneration scaffold and method

SO PCT Int. Appl., 31 pp.

CODEN: PIXXD2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003007879	A2	20030130	WO 2002-US22411	20020715
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 20030033021	A1	20030213	US 2002-195334	20020715
AU 2002316696	A1	20030303	AU 2002-316696	20020715
AU 2002316696	B2	20070830		
JP 2004535250	T	20041125	JP 2003-513448	20020715
JP 2004535252	T	20041125	JP 2003-513488	20020715
AU 2002322567	B2	20070906	AU 2002-322567	20020715

L9 ANSWER 20 OF 113 CAPLUS COPYRIGHT 2008 ACS on STN

IN Malaviya, Prasanna; Melican, Mora C.; Rezania, Alireza; Chun, Iksoo

TI Hybrid biologic/synthetic porous extracellular matrix scaffolds

SO PCT Int. Appl., 27 pp.

CODEN: PIXXD2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003007790	A2	20030130	WO 2002-US22409	20020715
WO 2003007790	A3	20030619		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,			

	FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,				
	CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US	20030021827	A1	20030130	US	2002-195341
					20020715
AU	2002316694	A1	20030303	AU	2002-316694
					20020715
AU	2002316694	B2	20070906		
EP	1416874	A2	20040512	EP	2002-747019
					20020715
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
	IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP	2004535250	T	20041125	JP	2003-513448
					20020715
JP	2005515802	T	20050602	JP	2003-513404
					20020715
AU	2002322567	B2	20070906	AU	2002-322567
					20020715

- L9 ANSWER 21 OF 113 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN
- AU Badylak, Stephen F. [Inventor]
TI Biomaterial derived from vertebrate liver tissue.
SO Official Gazette of the United States Patent and Trademark Office Patents,
(Apr. 30, 2002) Vol. 1257, No. 5. [http://www.uspto.gov/web/menu/patdata.ht](http://www.uspto.gov/web/menu/patdata.html)
ml. e-file.
CODEN: OGUPE7. ISSN: 0098-1133.
- PI US 6379710 20020430
- L9 ANSWER 22 OF 113 MEDLINE on STN DUPLICATE 2
- AU Bedossa Pierre; Ferlicot Sophie; Paradis Valerie; Dargere Delphine;
Bonvoust Frank; Vidaud Michel
TI Dystroglycan expression in hepatic stellate cells: role in liver fibrosis.
SO Laboratory investigation; a journal of technical methods and pathology,
(2002 Aug) Vol. 82, No. 8, pp. 1053-61.
Journal code: 0376617. ISSN: 0023-6837.
- L9 ANSWER 23 OF 113 MEDLINE on STN DUPLICATE 3
- AU Xiao Wenjun; Wang Yiping; Liu Xiaojing; Huang Minghui; Gan Tao
TI Expression of integrin alpha 6 in hepatic sinusoidal capillarization.
SO Zhonghua gan zang bing za zhi = Zhonghua ganzangbing zazhi = Chinese
journal of hepatology, (2002 Apr) Vol. 10, No. 2, pp. 90-2.
Journal code: 9710009. ISSN: 1007-3418.
- L9 ANSWER 24 OF 113 CAPLUS COPYRIGHT 2008 ACS on STN
- AU Nagaki, Masahito; Miki, Keisaburo; Kim, Yang-Il; Ishiyama, Haruo;
Hirahara, Ichiro; Takahashi, Hiroaki; Sugiyama, Akihiko; Muto, Yasutoshi;
Moriwaki, Hisataka
TI Development and characterization of a hybrid bioartificial liver using
primary hepatocytes entrapped in a basement membrane matrix
SO Digestive Diseases and Sciences (2001), 46(5), 1046-1056
CODEN: DDSCDJ; ISSN: 0163-2116
- L9 ANSWER 25 OF 113 MEDLINE on STN
- AU Xiao W; Wang Y; Liu X
TI The coordinated expression of laminin and its integrin receptor in hepatic
sinusoidal capillarization.
SO Zhonghua nei ke za zhi [Chinese journal of internal medicine], (2001 Sep)
Vol. 40, No. 9, pp. 618-20.
Journal code: 16210490R. ISSN: 0578-1426.
- L9 ANSWER 26 OF 113 MEDLINE on STN DUPLICATE 4
- AU O'Toole D; Kelly E J; McAllister M M; Layton A W; Norrdin R W; Russell W
C; Saeb-Parsy K; Walker A P
TI Hepatic failure and hemochromatosis of Salers and Salers-cross cattle.
SO Veterinary pathology, (2001 Jul) Vol. 38, No. 4, pp. 372-89.
Journal code: 0312020. ISSN: 0300-9858.

L9 ANSWER 27 OF 113 MEDLINE on STN DUPLICATE 5
AU Neubauer K; Saile B; Ramadori G
TI Liver fibrosis and altered matrix synthesis.
SO Canadian journal of gastroenterology = Journal canadien de gastroenterologie, (2001 Mar) Vol. 15, No. 3, pp. 187-93. Ref: 75
Journal code: 8807867. ISSN: 0835-7900.

L9 ANSWER 28 OF 113 MEDLINE on STN DUPLICATE 6
AU Walsh K M; Fletcher A; MacSween R N; Morris A J
TI Basement membrane peptides as markers of liver disease in chronic hepatitis C.
SO Journal of hepatology, (2000 Feb) Vol. 32, No. 2, pp. 325-30.
Journal code: 8503886. ISSN: 0168-8278.

L9 ANSWER 29 OF 113 MEDLINE on STN DUPLICATE 7
AU Maru Y; Hirosawa H; Shibuya M
TI An oncogenic form of the Flt-1 kinase has a tubulogenic potential in a sinusoidal endothelial cell line.
SO European journal of cell biology, (2000 Feb) Vol. 79, No. 2, pp. 130-43.
Journal code: 7906240. ISSN: 0171-9335.

L9 ANSWER 30 OF 113 SCISEARCH COPYRIGHT (c) 2008 The Thomson Corporation on STN
AU Yasoshima M; Tsuneyama K; Harada K; Sasaki M; Gershwin M E; Nakanuma Y (Reprint)
TI Immunohistochemical analysis of cell-matrix adhesion molecules and their ligands in the portal tracts of primary biliary cirrhosis
SO JOURNAL OF PATHOLOGY, (JAN 2000) Vol. 190, No. 1, pp. 93-99.
ISSN: 0022-3417.

L9 ANSWER 31 OF 113 CAPLUS COPYRIGHT 2008 ACS on STN
AU Zeng, Zhao-Shi; Cohen, Alfred M.; Guillem, Jose G.
TI Loss of basement membrane type IV collagen is associated with increased expression of metalloproteinases 2 and 9 (MMP-2 and MMP-9) during human colorectal tumorigenesis
SO Carcinogenesis (1999), 20(5), 749-755
CODEN: CRNGDP; ISSN: 0143-3334

L9 ANSWER 32 OF 113 CAPLUS COPYRIGHT 2008 ACS on STN
AU Neubauer, Katrin; Kruger, Michaela; Quondamatteo, Fabio; Knittel, Thomas; Saile, Bernhard; Ramadori, Giuliano
TI Transforming growth factor- β 1 stimulates the synthesis of basement membrane proteins laminin, collagen type IV and entactin in rat liver sinusoidal endothelial cells
SO Journal of Hepatology (1999), 31(4), 692-702
CODEN: JOHEEC; ISSN: 0168-8278

L9 ANSWER 33 OF 113 CAPLUS COPYRIGHT 2008 ACS on STN
IN Badylak, Stephen F.
TI Biomaterial derived from vertebrate liver tissue
SO PCT Int. Appl., 23 pp.
CODEN: PIXXD2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9825637	A1	19980618	WO 1997-US22727	19971210
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,				

FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,
GA, GN, ML, MR, NE, SN, TD, TG

CA 2274033	A1	19980618	CA 1997-2274033	19971210
AU 9856958	A	19980703	AU 1998-56958	19971210
AU 732726	B2	20010426		
EP 942739	A1	19990922	EP 1997-953153	19971210
EP 942739	B1	20060412		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001505917	T	20010508	JP 1998-526949	19971210
ES 2263185	T3	20061201	ES 1997-953153	19971210
US 20020160052	A1	20021031	US 2002-134416	20020429
US 6793939	B2	20040921		
US 20040157323	A1	20040812	US 2004-775386	20040210

L9 ANSWER 34 OF 113 MEDLINE on STN DUPLICATE 8

AU Uemura K; Takao S; Aikou T

TI In vitro determination of basement membrane invasion predicts liver metastases in human gastrointestinal carcinoma.

SO Cancer research, (1998 Aug 15) Vol. 58, No. 16, pp. 3727-31.
Journal code: 2984705R. ISSN: 0008-5472.

L9 ANSWER 35 OF 113 CAPLUS COPYRIGHT 2008 ACS on STN

AU Bresalier, Robert S.; Byrd, James C.; Brodt, Pnina; Ogata, Shunichiro; Itzkowitz, Steven H.; Yunker, Christopher K.

TI Liver metastasis and adhesion to the sinusoidal endothelium by human colon cancer cells is related to mucin carbohydrate chain length

SO International Journal of Cancer (1998), 76(4), 556-562
CODEN: IJCNAW; ISSN: 0020-7136

L9 ANSWER 36 OF 113 MEDLINE on STN DUPLICATE 9

AU Musso O; Rehn M; Saarela J; Theret N; Lietard J; Hintikka; Lotrian D; Campion J P; Pihlajaniemi T; Clement B

TI Collagen XVIII is localized in sinusoids and basement membrane zones and expressed by hepatocytes and activated stellate cells in fibrotic human liver.

SO Hepatology (Baltimore, Md.), (1998 Jul) Vol. 28, No. 1, pp. 98-107.
Journal code: 8302946. ISSN: 0270-9139.

L9 ANSWER 37 OF 113 CAPLUS COPYRIGHT 2008 ACS on STN

AU Yoshida, Tsuyoshi; Matsubara, Osamu; Adachi, Eihiro; Kino, Jun; Asamatsu, Chinatsu; Takeda, Yasushi; Hayashi, Toshihiko

TI Increased deposition and altered distribution of basement membrane-related collagens in human fibrotic or cirrhotic liver

SO Connective Tissue (1997), 29(3), 189-198
CODEN: COTIE7; ISSN: 0916-572X

L9 ANSWER 38 OF 113 MEDLINE on STN

AU Okuno K; Koh K; Kubo R; Shindo K; Yasutomi M

TI Diagnosis and therapy for metastatic liver cancer.

SO Gan to kagaku ryoho. Cancer & chemotherapy, (1996 Sep) Vol. 23, No. 10, pp. 1255-61. Ref: 17
Journal code: 7810034. ISSN: 0385-0684.

L9 ANSWER 39 OF 113 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 10

AU Aoki, Michiko; Noguchi, Satoshi; Katoh, Hiroyasu; Seki, Takayuki; Kojima, Kohichi; Nagata, Tomoko; Saitoh, Yoshiaki; Azegami, Jiro; Inada, Hiroko; et al.

TI A 52-week repeated dose oral toxicity study of bropirimine in beagle dogs with 9-week recovery test

SO Oyo Yakuri (1996), 52(5), 289-336

=> d ab 2-4 12

L2 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

AB The NCI globular domain of the basement membrane was isolated and purified from human liver, kidney, or placenta. The globular domain has a mol. weight of 170,000 and is comprised of 6 subunits each with a mol. weight of 28,000. Thus, 1 kg of placenta, kidney, or lung was homogenized and stirred at 4° for 24 h. The residue was extracted with guanidinium hydrochloride at 4° in the presence of p-hydroxymercuribenzoate and phenylmethane sulfonylfluoride, as proteinase inhibitors. The remaining residues were dialyzed against water and lyophilized. Approx. 20 g of the lyophilized residue was dissolved in 800 mL NaCl 0.2, CaCl₂ 0.002, Tris-HCl 0.05 M (pH 7.4), homogenized and subjected to digestion with 8 mg of collagen for 2 h at room temperature. The collagen digestion was repeated and the solution precipitated by the addition of EDTA 0.005, NaCl 3 M. The precipitate was dissolved in urea 2, Tris-HCl 0.05 M (pH 8.6), and applied to a DEAE cellulose column. The material that did not bind to the column was dialyzed against ammonium bicarbonate (pH 7-9) and digested with collagen for 24 at 37°. The final purification was performed on an Agarose A column in CaCl₂ 1 and Tris-HCl 0.05 M (pH 7.4) and the amino acid composition of the NCI globular domain of the basement membrane determined. Antibodies to the NCI globular domain were raised in rabbits and used in radioimmunoassays and enzyme immunoassays to determine the levels of basement membranes in body fluids.

L2 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 2

AB Collagens were extracted from human normal and cirrhotic livers. Alc., hemochromatotic, Wilson's disease, and posthepatitic cirrhosis were studied. The yield of extracted collagens was 60-95%. Normal liver contained 5.5 mg collagen/g wet tissue. In cirrhotic liver, collagen levels increased 4-7-fold. In all livers studied, approx. 2 mg collagen/g wet tissue remained insol. Each liver contained type I and type III collagens and a group of collagens with amino acid composition similar to that found in basement membranes. Three of these basement membrane collagens, A, B, and E, representing 50% of the liver basement membrane collagen, were purified and partially characterized. The other 50%, similar in composition to basement membrane collagen obtained from glomerulus, was heterogeneous and was not characterized. Collagens A and B were identical to the A and B chains isolated from placenta and skin. Collagen E was similar to the collagen previously isolated from human aorta. In cirrhotic, but not normal liver, an addnl. collagen, which was identified as a trimer of α 1 type 1 collagen, was found. Normal livers contained approx. equal amts. of type I, type III, and basement membrane collagens. The ratio of type I/type III collagen was <1. In cirrhotic livers all collagen types were increased; in livers containing <20 mg collagen/g fresh tissue, the ratio of type I/type III collagen remained similar to that found in normal liver. However, in cirrhotic livers with >20 mg collagen/g the tissue, type I collagen was the predominant type, and the ratio of type I/type III collagen increased.

L2 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

AB Basement membrane collagens were isolated from fractions of various human and embryonic chick tissues by a method that uses heat gelation of pepsin-solubilized collagens. Reduction under native conditions, followed by repepsinization, was necessary to obtain reproducible electrophoretic,

chromatog., and electron microscopic properties of the collagen fractions isolated by the given method. The amino acid compns. of materials obtained from several tissues are tabulated and discussed. Segment-long-spacing crystallites of chick embryo collagen revealed a distinctive band pattern by electron microscopy.